Departmental
Findings of Fact and Order
Air Emission License
Amendment #2
After-the-Fact

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

- 1. Lane Construction (Lane) located in Medway, Maine was issued Air Emission License A-14-71-I-N on August 30, 1999 permitting the operation of emission sources associated with their hot mix asphalt plant. The license was subsequently amended on May 16, 2000 (A-14-71-J-M).
- 2. Lane has requested a minor revision to their license in order to include the licensing of a hot oil heater and to revise the emission rates for the facility's asphalt plant.

B. Emission Equipment

Lane is licensed to operate the following additional equipment:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, <u>% sulfur</u>
Hot Oil Heater	2.0	14.3	#2 Fuel Oil, 0.5%

C. Revision Description

The Hot Oil Heater is a piece of existing equipment that was previously overlooked as licensable for this license. It is fed from the same #2 oil fuel tank as the facility's asphalt plant. Due to the relatively small amount of fuel fired in the Hot Oil Heater, requiring fuel with a lower sulfur content is deemed to be economically unjustified. Lane has not proposed any increase in the facility's annual fuel cap.

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Additionally, new AP-42 emission factors for asphalt plants have been published since the last permitting action for this source. Therefore, the facility's emissions have been revised to reflect this change. This reflects a change in calculation method only and not a change in operation.

D. Application Classification

This amendment will not affect actual emissions from the facility. Changes to the permitted annual emissions are due to changes in calculation method only. Therefore, this modification is determined to be a minor revision and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Hot Oil Heater

A summary of the BACT analysis for the Hot Oil Heater (2.0 MMBtu/hr) is the following:

- 1. The total fuel use for the facility (Asphalt Plant and Hot Oil Heater combined) shall not exceed 250,000 gal/year of #2 fuel oil, #4 fuel oil, and specification waste oil combined based on a 12 month rolling total.
- 2. The maximum sulfur content of the #2 fuel oil shall not exceed 0.5% by weight.
- 3. The maximum sulfur content of the #4 fuel oil and the specification waste oil shall not exceed 0.7% by weight.
- 4. The Hot Oil Heater shall fire only #2 fuel oil.
- 5. Chapter 106 regulates fuel sulfur content, however in this case a BACT analysis for SO₂ determined a more stringent limit of 0.5% was appropriate and shall be used.

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- 6. The NO_x , PM, and PM_{10} limits are based on data from similar #2 fired units of this size and age.
- 7. CO and VOC emission limits are based upon AP-42 data dated 9/98.

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8. Visible emissions from the Hot Oil Heater shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block averages in a continuous 3-hour period.

C. Asphalt Plant

Emissions from the Asphalt Plant are based upon AP-42 data dated 12/00.

D. Annual Emission Restrictions

Lane shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Allowable Annual Emission for the Facility

(used to calculate the annual license fee)

<u>Pollutant</u>	Tons/Year
PM	3.1
PM_{10}	3.1
SO_2	12.3
NO_x	5.1
СО	17.0
VOC	0.4

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ORDER

The Department hereby grants Air Emission License Minor Revision A-14-71-K-M, subject to the conditions found in Air Emission License A-14-71-I-N, in the following amendments: A-14-71-J-M, and in addition to the following conditions:

The following shall replace Condition (16)(g) of Air Emission Licenses A-14-71-I-N and A-14-71-J-M:

g. The asphalt rotary dryer shall be limited to a maximum of 49.3 MMBtu/hr heat input. The total fuel use for the facility (Asphalt Plant and Hot Oil Heater combined) shall not exceed 250,000 gal/year of #2 fuel oil, #4 fuel oil, and specification waste oil combined based on a 12 month rolling total. The sulfur content of the #2 fuel oil shall not exceed 0.5% by weight and the sulfur content of the #4 fuel oil and specification waste oil shall not exceed 0.7% by weight. Emissions from the baghouse shall not exceed the following:

<u>Pollutant</u>	grs/dscf	<u>lb/hour</u>
PM	0.03	8.84
PM_{10}	0.03	8.84
SO_2	-	34.76
NO_x	-	14.40
СО	-	48.00
VOC	-	0.98

The following shall replace Condition (17) of Air Emission License A-14-71-I-N:

(17) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour.

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The following are New Conditions:

- (22) Hot Oil Heater
 - A. The Hot Oil Heater shall fire only #2 fuel oil.
 - B. Emissions shall not exceed the following:

Equipment		PM	PM_{10}	SO ₂	NO _x	СО	VOC
Hot Oil Heater	lb/hr	0.16	0.16	1.01	0.60	0.07	0.01

- C. Visible emissions from the Hot Oil Heater shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.
- (23) Lane shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).
- (24) Lane shall pay the annual air emission license fee within 30 days of January 31st of each year. Pursuant to 38 M.R.S.A. Section 353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 M.R.S.A. Section 341-D, Subsection 3.
- (25) This amendment shall expire concurrently with Air Emission License A-14-71-I-N.

DONE AND DATED IN AUGUSTA, MAINE THIS	DAY OF	2003			
DEPARTMENT OF ENVIRONMENTAL PROTEC	TION				
BY:					
DAWN R. GALLAGHER, COMMISSIONI	ER				
PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES					
Date of initial receipt of application:	7/10/03				
Date of application acceptance:	<u>7/10/03</u>				
Date filed with the Board of Environmental Protection:					

This Order prepared by Lynn Ross, Bureau of Air Quality.